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10/553,622	03/09/2007	Daniel Andre Gastel	403518/WEINSTEIN	6043		
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LEYDIG VOIT & MAYER, LTD			DESAI, ANISH P			
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SUITE 300			PAPER NUMBER			
WASHINGTON, DC 20005-3960			1787			
NOTIFICATION DATE		DELIVERY MODE				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/553,622	GASTEL, DANIEL ANDRE	
	<b>Examiner</b>	<b>Art Unit</b>	
	ANISH DESAI	1787	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 June 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-19, 21-25, 27 and 28 is/are pending in the application.  
 4a) Of the above claim(s) 21-25, 27 and 28 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-19 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____.	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of claims 1-19 in the reply filed on 06/09/10 is acknowledged. It is noted that the original lack of unity requirement was between Group I claims 1-19 and Group II claims 20-25 (see Office action mailed on 05/19/10). In response, applicant deleted independent claim 20 (see 06/09/10 amendment) and added new independent claim 27. Applicant's traversal is on the ground(s) that claims 21-25, 27, and 28 now have the same technical feature as the product described in claim 1. Therefore, the unity of invention requirement of PCT Rule 13.2 is met. The Examiner respectfully disagrees for the reasons set forth below in paragraph 3. Additionally, as to applicant's arguments that there is no burden, the Examiner respectfully submits that the instant application is a national stage entry filed under 35 U.S.C. 371 and is therefore not subject to US restriction practice but rather subject to lack of unity practice, see MPEP 1893.03(d). It is noted that undue search burden is not a criterion in lack of unity analysis. The test is whether or not special technical features can be established.

2. Claims 21-25, 27, and 28 are withdrawn from further consideration (for reasons given below in paragraph 3) pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 06/09/10.

3. Newly submitted/amended claims 21-25 (amended), 27 (New), and 28 (New) are directed to an invention that lacks unity with the invention originally claimed (i.e. claims 1-19) for the following reasons: applicant has now added new independent claim 27 directed to a system for identification and monitoring of laminated product. The invention presented by the aforementioned claims (21-25, 27, and 28) and originally filled claims (claims 1-19) do not relate to a single general inventive concept under PCT Rule 13.1, because under PCT Rule 13.2, they lack the same or corresponding special technical features. The common technical feature between originally claimed invention (i.e. claims 1-19) and newly added/amended claims (claims 21-25, 27, and 28) is a laminated product having stack of alternating sheets and layers of an adhesive material, housing within the thickness of the stack and an electronic component located in the housing. This element can not be a special technical feature under PCT Rule 13.2, because this element is shown as being obvious over the prior art of Springer (US 2,106,385) in view of Brady et al. (US 6,100,804) as set forth in paragraphs 13-16 of this Office action (OA). Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-25, 27, and 28 are withdrawn from consideration as being directed to a nonelected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 2, 6, 8, and 11-18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**
5. With respect to claim 2, said claim recites "a transmission device that can be queried at a distance...". The recitation "...that can be queried at a distance" is vague because the term "at a distance" is indefinite without setting forth any numerical values to it. Further, it is unclear as to what is meant by the aforementioned recitation.
6. With respect to claim 6, the recitation "wherein **some of the identification information**" is vague and ambiguous, because it is unclear as to what constitutes "some" of the identification information.
7. Regarding claim 7, it is unclear as to what is meant by "...the transmission device receives the identification at a distance...", because the term "at a distance" is indefinite without setting forth any numerical values to it.
8. Regarding claim 8, it is unclear as to what is meant by "locked in terms of writing". Does applicant intend to claim that the memory that stores the identification information is read-only?

9. With respect to claim 11, said claim is indefinite because it is unclear as to what is meant by "basic identification information" and "other identification information". Further, the recitation "sufficient storage capacity" is indefinite when read in view of "basic identification information" and "other identification information" given that it is unclear as to what constitutes "sufficient". Additionally, with respect to claim 11 recitation "external support", it is unclear as to whether the external support is a structural part of the laminated product.

10. With respect to claim 17, this claim recites "the filling material", there is insufficient antecedent basis for this limitation in the claim. Claim 17 should depend from claim 16.

11. With respect to claim 18, said claim recites "composite material", it is unclear as to what is meant by "composite material". Specification fails to disclose what constitutes "composite material". For examination, the Examiner interprets "composite material" as material that is formed e.g. mixture of two or more material.

12. The Examiner respectfully reminds applicant that any amendment in response to the aforementioned rejection must have a support in the specification as originally filed in order to avoid the issue of new matter under 35 USC Section 112-first paragraph.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**13. Claims 1-9, 11-15, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Springer (US 2,106,385) in view of Brady et al. (US 6,100,804), and further as evidenced by Afzali-Ardakani et al. (US 5,767,789).**

14. With respect to claim 1, Springer discloses an improved shim (laminated product) formed of plurality of superimposed layers of loosely woven fibrous material (sheet) impregnated with a latex binder (adhesive) and compacted together to adhesively form a unitary structure (column 1, lines 1-11). According to Springer, the layers are compressed so that the latex is forced intimately into the porosities of the several layers forming a continuous connective resilient binder body extending throughout the several layers bonding them securely together (column 2, lines 9-14). Further, Figure 2 and at page 2 column 2 lines 10-20, Springer clearly discloses separation of sheet from the stack. Additionally, the sheets of Springer are separated without being torn (Figure 2). As such it is clear that the bonding force of the adhesive (latex) of Springer is less than the resistance of the sheet to tearing, and that the sheet has a resistance to tearing.

Furthermore, since the sheets of Springer are separable, it is clear that the thickness is adjustable by exfoliation. Moreover, Figures 1 and 5 of Springer discloses a housing (identified by numeral 14) within the thickness of the stack.

**15. With respect to claim 1, the difference between the claimed invention and the prior art of Springer is that Springer is silent as to teaching "an electronic component located in the housing".**

16. However, Brady discloses radio frequency identification system employing thin, flexible, electronic radio frequency identification (RFID) tag (abstract). Moreover, Brady discloses that RFID is becoming an important identification technology for tracking objects such as packages and merchandise (column 2 lines 26-40), and objects (column 3 lines 20-25), which the Examiner submits would also encompass items of manufacturing such as "shims" (laminated products).

17. Given that Springer discloses products such as shims and Brady discloses RFID devices (electronic identification component) that can be used to track packages, objects, and merchandise, it would have been obvious to use the RFID of Brady and locate it in the housing of the Springer's shim so as not to increase the thickness of the shim and protect the RFID device, and such RFID provides manufacturer of such shim products with ability to track such shim products.

18. As to claim 2, it is noted that the RFID of Brady has a memory and antenna (column 2 lines 39-41). Given that Brady has same component (memory) as that of claimed by applicant, it is clear that Brady's memory can be used "for storage of identification information identifying the product". Further, given that the antenna of Brady and the transmission device of applicant are formed of same material (e.g. see column 7 lines 57-58 of Brady disclosing copper and 0056 in Pg Pub of this application), it is clear that the transmission device (antenna) of Brady "can be queried at a distance for transmitting the identification information stored in the memory" "as claimed.

19. As to claims 3-4, it is noted that while the collective disclosure of Springer as modified by Brady (hereinafter "modified Springer") does not explicitly mention specific type of identification information as claimed, it is known in the RFID art to store information such as for example serial number in the memory unit. This is evidenced by column 4 lines 63-67 of Afzali-Ardakani. As such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to store the identification information including that of the presently claimed by claims 3-4, motivated by the desire to provide easy access to such information to consumer and manufacturer.

20. With respect to claims 5 and 14, Brady discloses that RFID tags contain read/write memory of up to **several kilobytes** (column 2 lines 34-35), which would intrinsically include 512 bits (or 64 byte).

21. With respect to claim 6, at column 16 lines 65-67, Brady discloses storing of information in encrypted form (i.e. coded) for security purpose.

22. With respect to claim 7, given that the transmission device (antenna) of Brady and that of claimed by applicant as set forth above are same, it is clear that the transmission device of Brady can intrinsically function to receive the identification information at a distance and write the information in the memory.

23. With respect to claims 8 and 15, it would have been obvious to lock the electronic component in terms of writing or read-only mode, motivated by the desire to protect the information from tampering.

24. As to claims 9 and 13, no evidence made of the record convinces the Examiner that the particular shape or size of the electronic component is significant or is anything more than one of numerous shapes a person of ordinary skill in the art would find obvious for the purpose of providing a suitable shape and size so as to easily place the component in the housing. Further, the Examiner submits that a change in size (dimension) is generally recognized as being within the level of ordinary skill in the art. Where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device, and the device having the claimed dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device.

25. With respect to claim 11, without setting forth what constitutes “sufficient memory”, it would have been obvious to provide the memory storage unit with enough memory for storing the basis identification information so that it can be readily available. Further, it would have been obvious to store other identification information on an external support (e.g. on a computer) such that if the memory unit of the laminated product fails, then manufacturer or consumer can still retrieve “other identification information” regarding the laminated product from the external support.

26. With respect to claim 12, at column 3 lines 44-45, Brady discloses RFID tags having overall thickness not exceeding 280 microns.

27. As to claim 18, the woven sheet of Springer that is impregnated with the latex (adhesive) meets claim requirement of “composite material”.

28. With respect to claim 19, Figures 1 and 5 of Springer show the sheets extend parallel to a plane of reference, and the housing also extends parallel to the plane of reference.

29. **Claims 5, 8, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Springer (US 2,106,385) in view of Brady et al. (US 6,100,804), and further as evidenced by Afzali-Ardakani et al. (US 5,767,789) as applied to**

**claims 1, 2, 4, 7, and 11 above, and further in view of Garber et al. (US 6,448,886B2).**

30. The modified Springer is silent as to explicitly teaching claims 5, 8, 14, and 15.
31. However, Garber discloses RFID devices that are used for information regarding characteristics of objects (e.g. date of manufacture, inventory status etc.) (column 1 lines 50-55). Further, Garber discloses RFID having storage capacity of between 128 bits and 512 bits (column 7 lines 25-35). Additionally, Garber discloses RFID devices provide significant amounts of user accessible memory in the form of read-only or write-only memory (column 7 lines 22-25).
32. As such it would have been obvious to provide in Springer memory having a storage capacity of 512 bits (greater than 64 bits), locking of the electronic component in terms of writing, or read-only mode, since it has been held that use of a known material based on its suitability for its intended use establishes *prima facie* case of obviousness.
33. **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Springer (US 2,106,385) in view of Brady et al. (US 6,100,804), and further as evidenced by Afzali-Ardakani et al. (US 5,767,789) as applied to claims 1 and 4 above, and further in view of Paratore et al. (US 6,294,997 B1).**
34. The modified Springer is silent as to teaching claim 10.

35. However, Paratore discloses RFID tag with a timing module to measure elapsed time and environmental module to detect certain environmental conditions (abstract).

The environmental module enables the user to determine how long the RFID tags have been exposed to certain environmental conditions that have been pre-defined by user (abstract). Further, the RFID tag of Paratore includes a micro-sensor that can be adapted to detect temperature (column 2 lines 48-55).

36. It would have been obvious to provide the electronic component with a means for measurement of temperature so as to ascertain the information such as how long the component is exposed to certain environmental conditions (e.g. elevated temperature).

37. **Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Springer (US 2,106,385) in view of Brady et al. (US 6,100,804), and further as evidenced by Afzali-Ardakani et al. (US 5,767,789) as applied to claims 1, 2, 11, and 15 above, and further in view of Murasawa (US 6,207,004B1).**

38. The modified Springer is silent as to teaching claims 16 and 17.

39. However, Murasawa discloses a method for mass producing IC cards (electronic components) (abstract). Further, at column 2 lines 11-25, Murasawa discloses providing electronic components in aperture (housing) and filling the aperture with adhesive which includes epoxy (column 5 lines 30-35). Additionally, as shown in Figure 1 (b), (c), (d), the housing is delimited by an interior wall (see area identified by numeral

6 in Figure 1(b)) and the filling material (12) fills the housing around the electronic component and bonds said component (3) to the interior wall.

40. As such, it would have been obvious to provide the housing and the filling material as claimed in claims 16-17 which is taught by Murasawa, motivated by the desire to securely place the electronic component in the housing.

**41. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Springer (US 2,106,385) in view of Brady et al. (US 6,100,804), as evidenced by Afzali-Ardakani et al. (US 5,767,789) and further in view of Garber et al. (US 6,448,886B2) as applied to claim 15 above, and further in view of Murasawa (US 6,207,004B1).**

42. The modified Springer is silent as to teaching claim 17.

43. However, Murasawa discloses a method for mass producing IC cards (electronic components) (abstract). Further, at column 2 lines 10-25, Murasawa discloses providing electronic components in aperture (housing) and filling the aperture with adhesive which includes epoxy (column 5 lines 30-35).

44. As such, it would have been obvious to provide the filling material as claimed in claim 15, motivated by the desire to securely place the electronic component in the housing.

***Conclusion***

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- (A) US Patent 1,951,730 to Lloyd Johnson discloses a laminated shim.
- (B) US Patent 1,365,291 to Thomas Gray discloses a shim.
- (C) A brochure titled "Peelable Shims", JICEY precision shims.
- (D) A brochure titled "New X-Fiber® The High-Resistance Composite Material".
- (E) US 2005/0079782 to Gastel discloses peelable shim.
- (F) US 2008/0000567A1 to Gastel discloses peelable shim.

46. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH DESAI whose telephone number is (571)272-6467. The examiner can normally be reached on Monday-Friday, 9:00AM-5:30PM.

47. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

48. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. D./  
Examiner, Art Unit 1787

/Callie E. Shosho/  
Supervisory Patent Examiner, Art Unit 1787